**donepezil**  (doe-nep-i-zill)

**Therapeutic Class:** Anti-Alzheimer's agents

**Pharmacologic Class:** Cholinesterase inhibitors

**Pregnancy Category:** C

**Indications**

Mild, moderate, or severe dementia/neurocognitive disorder associated with Alzheimer's disease.

**Action**

Inhibits acetylcholinesterase thus improving cholinergic function by making more acetylcholine available.

**Therapeutic Effects:** May temporarily lessen some of the dementia associated with Alzheimer's disease. Enhances cognition. Does not cure the disease.

**Pharmacokinetics**

**Absorption:** Well absorbed after oral administration.

**Distribution:** Unknown.

**Protein Binding:** 96%.

**Metabolism and Excretion:** Partially metabolized by the liver (CYP2D6 and CYP3A4 enzymes) and partially excreted by kidneys (17% unchanged). Two metabolites are pharmacologically active.

**Half-life:** 70 hr.

**TIME/ACTION PROFILE (improvement in symptoms)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>unknown</td>
<td>several wk</td>
<td>6 wk†</td>
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</tbody>
</table>

†Return to baseline after discontinuation

**Contraindications/Precautions**

- **Hypersensitivity to donepezil or piperidine derivatives.**
- **Use Cautiously:** Underlying cardiac disease, especially arrhythmias; syndrome or supraventricular conduction defects; History of ulcer disease or currently taking NSAIDs; History of asthma or obstructive pulmonary disease; OB, Lactation, Pedi: Safety not established; assumed to be secreted in breast milk. Discontinue drug or breast-feed.

**Adverse Reactions/Side Effects**

**CNS:** Headache, abnormal dreams, depression, dizziness, drowsiness, fatigue, insomnia, syncope, sedation (unusual).

**CV:** Atrial fibrillation, hypertension, hypotension, vasodilation.

**GI:** Diarrhea, nausea, vomiting, weight gain (unusual).

**GU:** Frequent urination.

**Derm:** Ecchymoses.

**Metab:** Hot flashes, weight loss.

**MS:** Arthritis, muscle cramps.

**Drug Interactions**

- **Drug-Drug:** Exaggerates muscle relaxation from succinylcholine. Interferes with the action of anticholinergics. Decreases effects of bethanechol. May 40% to 50% of GI bleeding from NSAIDs. Quinidine and ketoconazole 7 metabolism of donepezil. Rifampin, carbamazepine, dexamethasone, phenobarbital, and phenytoin induce the enzymes that metabolize donepezil and may 4 its effects.

**Drug-Natural Products:** Jimson weed and scopolia may antagonize cholinergic effects.

**Route/Dosage**

**Mild to Moderate Alzheimer's Disease**

**PO (Adults):** Initial 5 mg once daily; after 4–6 wk may be increased to 10 mg once daily (dose should not exceed 5 mg/day in frail, elderly females).

**Severe Alzheimer's Disease**

**PO (Adults):** Initial 5 mg once daily; may be increased to 10 mg once daily after 4–6 wk; after 3 mo, may be increased to 23 mg once daily.

**NURSING IMPLICATIONS**

**Assessment**

- Assess cognitive function (memory, attention, reasoning, language, ability to perform simple tasks) periodically during therapy.
- Monitor heart rate periodically during therapy. May cause bradycardia.

**Potential Nursing Diagnoses**

- Disturbed thought processes (Indications)
- Impaired environmental perception (Indications)

**Patient Teaching**

- Caution patient and caregiver to report symptoms suggestive of infection, especially pneumonia, urinary tract infection, skin infection.

**Interactions**

- **Caution:** Drug interactions affecting donepezil or piperidine derivatives.

**Discontinued**

- **Generic Implication:** Generic equivalent not available.
Implementation

- Do not confuse Aricept with Aciphex or Azilect.
- PO: Administer in the evening just before going to bed. May be taken without regard to food.
- Oral disintegrating tablets should be allowed to dissolve on tongue, followed with water.
- Swallow 23 mg tablet whole. Do not split, crush, or chew; may increase rate of absorption.

Patient/Family Teaching

- Emphasize the importance of taking donepezil daily, as directed. Missed doses should be skipped and regular schedule resumed the following day. Do not take more than prescribed; higher doses do not increase effects but may increase side effects.
- Inform patient/family that it may take weeks before improvement in baseline behavior is observed.
- Caution patient and caregiver that donepezil may cause dizziness.
- Advise patient and caregivers to notify health care professional if nausea, vomiting, diarrhea, or changes in color of stool occur or if new symptoms occur or previously noted symptoms increase in severity.
- Instruct patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and to consult health care professional before taking other Rx, OTC, or herbal products.
- Advise patient and caregivers to notify health care professional of medication regimen before treatment or surgery.
- Emphasize the importance of follow-up exams to monitor progress.

Evaluation/Desired Outcomes

- Improvement in cognitive function (memory, attention, reasoning, language, ability to perform simple tasks) in patients with Alzheimer’s disease.

Why was this drug prescribed for your patient?